



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/987,984	11/16/2001	Morena Ferrario	Q67309	7969

7590 09/09/2004
SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC
2100 Pennsylvania Avenue, N.W.
Washington, DC 20037-3213

EXAMINER

BARNIE, REXFORD N

ART UNIT	PAPER NUMBER
----------	--------------

2643

DATE MAILED: 09/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/987,984

Applicant(s)

FERRARIO ET AL.

Examiner

REXFORD N BARNIE

Art Unit

2643

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 16 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

R. N. Barnie
REXFORD BARNIE
PRIMARY EXAMINER

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 09/06/2004.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 3, 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al. (US Pat# 6,748,232) in view of Corry (US Pat# 6,442,143).

Regarding claim 1, Anderson teaches an apparatus and method for power control in a radio communication system in (see col. 2) that a threshold associated with a degrade source can be compared to a quality of signal associated with a communication channel. Anderson fails to teach in detail the possibility of having a plurality of type of degrade source.

Corry teaches a signal quality maintenance in a communication system in (see figs. 2, 4, 5 and col. 1 line 40-col.2 line 43) wherein a threshold can be compared to a received signal to determine the type of signal degradation including fading or interference.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Corry into that of Anderson thus making it possible to determine source of degradation, to take corrective measures accordingly and to avoid loss/improve revenue.

Regarding claim 3, the claim is rendered obvious because the combination teaches a two criteria structure wherein a comparison can be made to determine what kind of distortion, a degrade service could be.

Regarding claims 7 and 8, The examiner takes official notice that it's well known to send alarms to a central location for further monitoring when network problems/faults are detected and using back up elements including paths/channel to complete calls

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al. (US Pat# 6,748,232) in view of Corry (US Pat# 6,442,143). And further in view of Kaewell, Jr. et al. (US Pat# 5,752,190).

Regarding claim 2, The combination fails to teach the claimed subject matter in detail as taught by Kaewell et al. where correlation can be performed on signals and a determination can be made accordingly in (see cols. 4-5).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Kaewell into that of the

combination thus making it possible to improve system performance in a fading channel and to avoid loss/improve revenue.

Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al. (US Pat# 6,748,232) in view of Corry (US Pat# 6,442,143). And further in view of Balachandran et al. (US Pat# 6,108,374).

Regarding claims 5-6, the combination fails to teach using trellis codes when determining the quality of services associated with a channel. Balachandran et al. teaches a system and method for measuring channel quality information which can be done by using factors including trellis code in (see col. 4 lines 59-65).

Thjerefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Balachandran et al. into that of the combination thus making it possible to determine and improve signal quality effectively.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al. (US Pat# 6,748,232) in view of Corry (US Pat# 6,442,143) and further in view of LeCorney (US Pat# 6,674,719).

Regarding claim 4, The combination fails to teach using a mean square error when determining quality of service associated with a process or signal.

LeCorney teaches an algorithm in monitoring disturbance wherein a mean square error algorithm in conjunction with a threshold level can be used in assessing QOS in (see disclosure).

Art Unit: 2643

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of LeCorney into that of the combination thus making it possible to determine QOS and to generate alarm where a threshold(s) has/have been exceeded in order to take corrective measures.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **REXFORD N BARNIE** whose telephone number is (703)306-2744. The examiner can normally be reached on M-F 9:00-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, CURTIS KUNTZ can be reached on (703) 305-4708. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PRIMARY EXAMINER
REXFORD BARNIE
09/06/04

RBarnie
REXFORD BARNIE
PRIMARY EXAMINER